

REJECTIONS UNDER 35 USC §103

The standing 35 USC §103 rejections of Claims 1-11 as being unpatentable based upon combinations of Aloni *et al.* (USP 6,360,005), Steffan *et al.* (USP 5,999,003), Nara *et al.* (USP 6,421,122) and Tanaka (USP 5,995,087) are continued to be strongly respectfully traversed based upon the following.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated herein by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

The standing rejection CONTINUES to fail in at least two regards, i.e., both Aloni *et al.* (as a primary reference) and Steffan *et al.* (as a secondary reference), at best, appear to disclose only a "second area" for classified defects, and appear NOT to disclose or suggest anything analogous to Applicant's "first area"; and, even assuming *arguendo* that Aloni *et al.* and Steffan *et al.* DO disclose something analogous to Applicant's "first AND second areas", Aloni *et al.* and Steffan *et al.* still do NOT disclose or suggest Applicant's disclosed and claimed "means for moving". These defects naturally follow from the fact that both Aloni *et al.* and Steffan *et al.* are directed to AUTOMATIC defect classifier arrangements (as opposed to Applicant's arrangement directed mainly to manual classification by a user reviewing/moving defects).

The above contentions are elaborated as follows. More particularly, it is respectfully noted that Aloni *et al.*'s disclosure is directed to an automatic defect classifier arrangement, i.e., where a plurality of defect detection operator units 118-125 (see column 24, first paragraph) and a false alarm reducing unit 250 automatically categorizes the defects according to predefined criteria such as edge/isolated/corner defect, size, etc. (see column 26, last paragraph). Aloni *et al.* does disclose the FIG. 13 operator display 256 (e.g., CRT). However, as set forth in Aloni *et al.*'s column 27, second and third paragraphs, the display "...comprises a display of the defect images analyzed by the false alarm reducing unit 250....The on-line display 256 enables the operator to review the defect images and, via a defect classification unit 258, to amend defect classifications." In other words, by the time a user sees a defect image, the defect ALREADY HAS BEEN CLASSIFIED, and the best the user can do with respect to a defect is REJECT or AMEND the classification.

Most importantly, THERE IS NO "FIRST AREA" in Aloni et al., since defects have already been classified into (assuming *arguendo*) second areas. And since a main objective of Aloni *et al.* is to automate and speed-up defect classification, there would be NO, OR EVEN NEGATIVE, INCENTIVE for Aloni et al.'s arrangement to be modified to include a "first area" to allow a user to classify manually from scratch.

Further, Aloni *et al.* contains ABSOLUTELY NO DISCLOSURE as to the operations of exactly how a user may reject or amend a classification. Especially, Aloni *et al.* does not disclose any operation analogous to Applicant's "means for moving".

Steffan *et al.* similarly is directed to an automatic classification arrangement, and, at best, Steffan *et al.* shows defects that have already been classified into (assuming *arguendo*) second areas (see Steffan *et al.* FIG. 2b). Since a main objective of Steffan *et al.* is to automate and speed-up defect classification, there would be NO, OR EVEN NEGATIVE, INCENTIVE for Steffan *et al.*'s arrangement (like Aloni *et al.*) to be modified to include a "first area" to allow a user to classify manually from scratch. Further, at best, Steffan *et al.* displays defect "thumbprints" (e.g., some type of bar graph) and numerical values, not defect images. Still further, Steffan *et al.* does NOT display each and every defect, but at best, displays "thumbprints" for only example (sample) defects within a given classification. If a user cannot see the actual image of each individual defect, it would be impossible for a user to classify each defect individually.

To summarize, neither the primary, nor secondary, reference disclose or suggest a "first area" or Applicant's "means for moving". To continue, in Applicant's disclosure, Applicant describes an example "means for moving" which involves a pointing device (e.g., mouse) and a drag-and-drop operation. The Examiner may be tempted to argue that it would have been obvious to apply Tanaka's alleged mouse/drag-and-drop operation to move erroneously-classified defects from one area to another. Again, it is noted that the applied references do not disclose Applicant's first area.

It is respectfully submitted that such argument would be improper in that the courts have held that an Examiner cannot make substitutions at will to references in a hindsight attempt to arrive at Applicant's invention. The Federal Circuit has stated,

“[t]he mere fact that the prior art may be modified in a manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.” In *re Fritch*, 972 F.2d 1260, 1266 n.14 (Fed. Cir. 1992), citing In *re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). Again, given that both *Aloni et al.* and *Steffan et al.* are directed to automated classifier arrangements, here there is negative incentive to include a “first area” and to allow a user to manually classify via drag-and-drop into a second area.

Turning to the final applied reference, *Nara et al.* appears to have been cited for disclosing an arrangement for a method of manufacturing. However, it is respectfully submitted that *Nara et al.* does not cure the deficiencies mentioned above with respect to the *Aloni et al./Steffan et al./Tanaka* references. Accordingly, it is respectfully submitted that no *Aloni et al.*, *Steffan et al.*, *Nara* and/or *Tanaka* combination could have resulted in or suggested Applicant's disclosed and claimed invention.

In addition to the foregoing, the following additional remarks from Applicant's foreign representative are also submitted in support of traversal of the rejection and patentability of Applicant's claims.

One important feature of Applicant's disclosed and claimed invention is that an operator can carry out a classification by a drag and drop operation using a mouse or the like on the screen, while looking at all the defect images on the display screen, see Applicant's specification page 7, line 17 through page 8, line 8.

Regarding the difference between the applied art and Applicant's invention, Office Action comments allege that:

A. Aloni *et al.* discloses displaying the classified defect images in order to allow the operator to review and amend the defect classification, thereby allowing the operator to confirm the correctness of his criterion;

B. Aloni *et al.* does not expressly state providing the classification and the reviewing at the same time;

C. Steffan *et al.* teaches that it is known to provide the first area for displaying a plurality of detected images and. a plurality of bins or "second areas" for classifying the detected images; and

D. It would have been obvious for one to modify the displaying of the defect images allowing the operator to review and correct the criterion as disclosed by Aloni *et al.* to include displaying the unclassified and the classified at the same time because it is a visual aid to the operator for classification.

Steffan *et al.* discloses "second areas" for classifying the detected images, however Steffan *et al.* does not expressly disclose "second areas" for displaying actual visual images of detected defects (i.e., instead displays sample "thumbprints"), and does not disclose drag-and-drop means for moving a visual image itself from the first area to the second area.

If Aloni *et al.* and Steffan *et al.* are combined, it is respectfully submitted that only a "bin" with an example "thumbprint" is displayed in second areas on the screen, and the operator needs to change a "bin" data for any reclassification of a defect.

In contrast, according to Applicant's invention, a user does not need to change any bin data, and instead can easily carry out classification by a drag and drop operation using a mouse or the like on the screen while looking at all the defect

images on the display screen, (see our specification page 7, line 17 through page 8, line 8). As a result of such ease of use, it is respectfully submitted that Applicant's invention is advantageous in the art. Accordingly, Applicant respectfully submits that Applicant's invention should not be rejected by any Aloni *et al.* and Steffan *et al.* foundation of references.

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) would not support a §103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such §103 rejection, and express written allowance of all of the §103 rejected claims, are respectfully requested.

REFERENCE ANTEDEATEABLE

Applicant respectfully notes that an effective filing date (29 November 1999) of the Nara *et al.* reference falls between the present application's U.S. filing date (01 December 1999) and the present application's foreign priority date (01 December 1998), and accordingly, such reference can be removed as valid prior art by the filing of an English language translation of Applicant's foreign priority document(s) together with a statement that the translation of the certified copy is accurate. Applicant respectfully reserves the right to file such certified English translation in order to remove such reference as valid prior art. The Examiner is invited to telephone the undersigned at the local D.C. area number 703-312-6600, to request such certified copy in the event that filing of the same would move the application to allowance.

Based upon the foregoing, reconsideration and withdrawal of such rejections are respectfully requested. The above statements, and/or the filing of any English translation, should not be taken as an indication or admission that the art is substantively relevant, but is merely use of a procedural approach to preclude art.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, *i.e.*, Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

EXAMINER INVITED TO CALL

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703-312-6600, to discuss an Examiner's Amendment or other suggested actions for accelerating prosecution and moving the present application to allowance.

CONCLUSION

Applicant respectfully submits that the present application is now in condition for allowance, and an early Notice of Allowance to that effect is respectfully requested.

This Amendment is being filed within the shortened statutory period for response set by the Office Action mailed 27 August 2003, and therefore, no Petition for extension of time or fee is required. To whatever other extent is actually appropriate and necessary, Applicant petitions for an extension of time under §1.136. Please charge any shortage in any fees due in connection with this application to ATS&K Deposit Account No. 01-2135 (Order No. 501.37892X00).

Respectfully submitted,



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